

Naziabomb

Search this site

Nazi Atomic Bomb projects

[Beginnings](#)[How Nuclear Weapons work](#)[How the Nazi A-bomb worked](#)[How the Nazi Atomic Bomb worked](#)[Japan's A-Bomb project](#)[Nazi Bell project](#)[Nazi Heavy Water supplies](#)[Nazi Nuclear Research Teams](#)

Sitemap

Nazi Atomic Bomb projects >

Nazi Bell project

Put most simply the Nazi Bell was in fact a heavy particle accelerator used as an artificial neutron source to breed Protactinium 233 from Thorium 232. Protactinium would naturally degrade after 27 days into pure bomb grade Uranium 233. Heisenberg advocated this method at the Harneck Haus conference in July 1942 and worked closely with Swiss engineer Dr Walter Dallenbach at a secret facility known as "Forschungsstelle D" to develop the Nazi bell.

It harnessed the fluorescent quality of Mercury to cause collisions between electrons and photons, which in result released thermal neutrons. The device was surrounded by a concave beryllium mirror to reflect neutrons back into a mass of Thorium oxide placed at the core. The machine generated this X-ray plasma in orbit around an axle which spun two carefully phased contrarotating drums.

How the Story Emerges

In August 1997 a Polish Intelligence officer with access to Polish Government documents made writer Igor Witkowski aware of the Nazi Bell. Original documents came from war crime interrogation of former SS Lt General Jakob Sporrenberg after the war.

According to Witkowski whilst working as a military journalist, an undisclosed member of Polish military intelligence showed him some interesting documents. Witkowski received discreet access over a period of a month during which he transcribed files by hand. These documents have not been independently verified, however there are several less well detailed corroborations of the Bell project from entirely different sources.

Witkowski read of a centrifuge device shaped like a Bell with hemispherical domed top. The outer Bell was made of a three inch thick ceramic material, much like a high voltage insulator. Said to be 9 feet in diameter and 12-14 feet high. It consumed prodigious amounts of electrical power and glowed violet-blue when operated for short periods.



Inside the Bell were located two contra rotating drums. [1] Mercury (alternate accounts say amalgams of mercury) was spun inside these drums. Jelly like compounds of Beryllium with Thorium were located in flasks within the central axis. Beryllium compounds in use were called "Xerum 525." During WW2 Jelly like paraffin was used as a moderator in some reactor experiments, thus by implication Xerum 525 most likely contained Beryllium and Thorium suspended in Paraffin.

Dr Ing Ernst Nagelstein visited a conference in Switzerland on 2 November 1944 where he disclosed to an OSS agent present that Auer was refining Thorium to metal and there was no known use for Thorium. He

also reported that Otto Hahn was working on A-bomb using either Uranium or Thorium

Thorium was mined in Silesia near the Bell's location. Even larger stocks were available in France. When the Allies landed at Normandy in 1944, Germany urgently shipped tons of French Thorium eastwards deep into Germany by rail. Why ship it so urgently and what made it so important?

Secret Code Names

Numerous Top Secret codenames are associated with the so-called Nazi Bell. The term Nazi Bell however is just a modern affectation, due to the device's resemblance to a Bell. When the Bell turned up on a German plane in Argentina however in May 1945, Argentine Intelligence referred in a report which was classified until 1993, calling it the "Bell."

Priority classification was invoked for the Bell in 1944, quoted as SS/1940. This classification was cited seeking the release from arrest of engineer Richard Cremer from a 2 year sentence for defeatest attitudes. The name Charite-Anlage applied specifically to engineering and manufacture of the Bell itself.

Another code name associated was Der Laternenträger (Lantern Bearer), a loose metaphor for the Light Bearer, Lucifer presumably refers to medical and biological experiments with radiation. It may also refer to the weaponisation of nuclear material produced by the Bell. Der Laternenträger research was based in Furstenstein Castle according to Gross Rosen camp survivor, Professor Mieczyslaw Moldavia. Researchers involved with this project were also investigating and testing pressure suits for a manned V-2 rocket known as the A-9, part of a manned two stage rocket for attacking New York.



The project was also known as Kronos (Saturn) one of which refers to the nuclear physics aspect of experiments with the Bell. Given the Bell exploited spin polarisation of atoms to create a

plasma, it would be entirely fitting to apply Kronos as reference to the rings of Saturn.

The final, but most well known code name was Die Glocke. There is no clear indication what this refers however it probably relates to a poem by Freidrich Schiller, called "Das Lied von der Glocke" (Song of the Bell). An excerpt of the poem below:

*Take wood from the trunk of the fir,
But let it be quite dry,
That the compressed flame
Roars into the furnace's chamber.
Cooks the copper's soup,
Quickly bring the tin thereto,
That the viscous meal for the bell,
Floweth in the manner right.*

What within the dam's deep pit
Was built by hand with fire's help,
In the towers bell floor high up
Loudly will proclaim of us.
Endure it will in later days
And touch many a human ear
And with the grieving will lament
And join its voice to the service's choir.
What down below for Earth's son
The changing destinies will bring,
That beats on the metallic crown,
Which edifyingly passes it on.

*White bubbles I now see burst,
Well! The masses are in flow.
Let the salt of ashes permeate it,
That accelerates the casting.
From foam too
The mixture must be free,
That from the pure metal
Pure and full the voice may sound.*

It tells the story of casting a bell, but in the process also parodys life and the development of manhood. It's talk of purity spoke to Nazis on many levels both relating to purity of the metal and purity of race. My speculative conjecture is that Die Glocke was code for the forging of an Atomic weapon.

Bell's Scientific Purpose?

One theory and it is my personal theory, is that the Bell used a hitherto barely mentioned

alternate method to acquire fissile Uranium for Atomic weaponry. Not Uranium 235, but rather Uranium 233.

A method which relies upon the spin polarisation of atoms in a plasma. It is an electrically induced state of matter in addition to those which we are normally used to, namely solids, liquids, or gas.

Principle scientist in charge of the Projekt Thor, was Prof Walther Gerlach. In 1922 he became famous as an understudy to Otto Stern, for their discovery of the deflection of atoms in a magnetic field, known as the Stern–Gerlach effect. This was also the basis of Quantum Physics.

When Stern fled Jewish persecution Gerlach continued research at Goeth Institute, Frankfurt am Main where in 1933 he experimented with the fluorescence of Mercury under the influence of magnetic fields. Gerlach had also worked on transmutation of elements by photo chemistry.

I suggest the Bell, combined spin polarisation with another effect, photo-chemistry pioneered in 1936 by Dr Ronald Richter. Richter developed Carbide arc plasma furnaces for a chemical plant at Eger in Czechoslovakia. When the plant switched to developing Lithium batteries for U-boats Richter discovered he could induce radiation by injecting Deuterium into the Lithium plasma.

With photo-chemistry the concept creates a dense plasma contained by powerful electric magnets to cause fluorescence in Mercury. Excited Mercury ions would then cause Beryllium to emit slow neutrons to be captured by Thorium 232, changing it into Uranium 233.

A variation of this method using Uranium 238 could also conceivably breed Plutonium for atomic weapons without the need for a nuclear reactor.

One possible explanation why contra rotation was required of the drums may have been to do with reverse shear of the spin polarisation. First drums would work together to spin a polarised plasma in one direction. Then the outer drum would have reversed direction to induce a shock wave, releasing gamma radiation.



Project Thor began with Heeres Versuchanstalt (No.10 - Laboratory, Wehrmacht), in January 1942. The project office was located west of Breslau (modern Wroclaw) at Neumarkt. On 1 November 1943, Thor moved into it's new home, a complex built beneath Gandau air base. Thor operated in partnership with private joint ventures by Fürstenau und Co. GmbH, AEG, Siemens and Bosch.

Thor also seems to have involved a powerful Tesla Coil, or Van der Graff generator built near Frankfurt am Main. Radiation from high voltage discharges were reported to have stopped engines of bomber aircraft flying overhead. This prompted a special Allied investigation called Project 1217 to investigate whether radiation discharges were a new form of weapon.

Prof Walther Gerlach who headed Thor for Heereswaffenamt was a dedicated scientist. In 1943 Gerlach received the Nobel prize for his work on spin polarisation of atoms. This itself was peculiar because his published work on the subject was in the 1920s and early 1930s. What prompted the awarding of recognition in 1943?

As an administrator, in emergency measures to progress the German A-bomb project, Gerlach was also charged with procuring fissile Uranium from January 1944. He was appointed in charge of the entire Uranium project by Heereswaffenamt, replacing Dr Abraham Essau.

Documents captured by ALSOS at Strassburg, often referred to as the Goudsmitt Papers which were classified after the War today reveal drawings of a tall standing device, looking like a Van der Graff generator, or perhaps a Tesla Coil. At the very top inside it's spherical head was a spinning device. In the margin are notes describing 5 million volts!

Nazi research papers captured at Strassburg concerning wartime nuclear projects were classified and archived in USA. One report has a diagram of a tall cylindrical device said in the plan to generate 5 Million Electron Volts (5MeV). This device resembled a giant Van der Graff generator and had no obvious purpose for a conventional nuclear reactor.[2]

<http://www.deutsches-museum.de/archiv/archiv-online/geheimdokumente/beurteilung/statusbericht-gerlach/dokument-12/>

At the Kaiser Wilhelm Institute for Biophysics in 1940, biologist Boris Rajewsky raised concerns about increased experimentation with artificial radiation and called for a project to research the effects of radiation. A 3 million volt device was built for Rajewsky's research whose existence remains obscure.

When Gerlach took over from Essau in January 1944 he shunned KWI's extravagant and wasteful research projects. He focused exclusively on development of nuclear weapons. At a meeting with Mentzell and Schumann in October 1944 they passed a motion not to turn over the still unfinished 3 million volt machine to Rajewsky because other previous high voltage "neutron

generators" had been destroyed by Allied bombing. The new machine was vital for "the production of neutrons in physics and in the physics of explosives." No information is available to identify what these earlier neutron generators were, or where their location was. [3]

Charite Anlage

After 22 July 1944, the SS took over all nuclear projects from Heereswaffenamt. Thor was replaced by Charite Anlage along with a host of other codenames issued by SS Armaments office, Forschungen Entwicklungen, Patente (research development work patents) FEP headed by Admiral Rhein.

The armaments office was headed by SS Brigadeführer Heinrich Gärtner. The Bell project itself was headed by SS Obergruppenführer Emil Mazauw. SS Lt General Dr Hans Kammler has often been mentioned in relation to the Bell project however Kammler's command appears connected more with armaments production whilst Mazauw's command was focused on research and development. It is possible however given his responsibility for nuclear weapons that he was connected with the weaponisation of material produced by the Bell. [4]



Furstenstein Castle

Almost exactly a year after it arrived at Breslau, as Soviet forces fought across Poland the Bell was shifted a short distance south into foothills of the Owl Mountains inside a complex of tunnels beneath Furstenstein castle. The complex had been built by organisation Todt under the

supervision of Xavier Dorsch These tunnels included a 2 kilometre long subterranean rail connection with the main railway line through Lubiechow in the valley below. The tunnel was connected with the castle above by elevator in a 50 metre tall shaft.

Laboratories for developing electrical discharge systems for the Bell were at Neumarkt (modern Sroda Slaska) and Leubus (modern Lubiaz) disguised in the facility of Schlesische Werkstätten der Fürstenau, (Fürstenstein Castle) with corporate involvement by AEG (AEG-Allgemeine Elektrizitäts-Gesellschaft, Annaberg in Erzgebirge -bn) and Siemens (control mechanism). Manufacture of the complex, contra-rotating centrifugal drum mechanism was performed by BMAG (Berlin Anhaltische Maschinenbau AG) located at Dessau, home of the sprawling Junkers aircraft factory complex. In this context, BMAG was also awarded a contract for industrial scale production of Dr Erich Bagge's Isotope Sluice centrifuges.

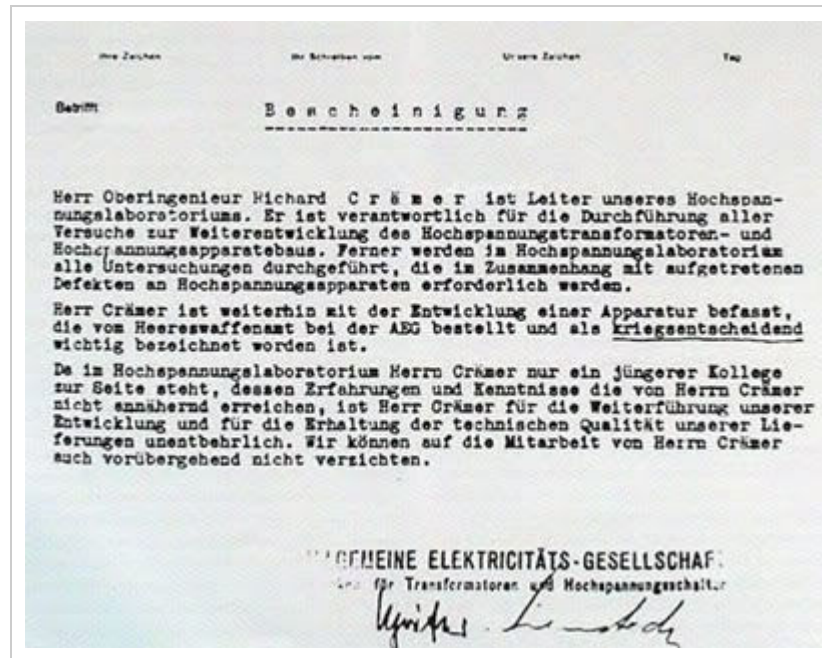
A sizeable underground facility existed at Schloss Fürstenstein (underneath Fürstenstein Castle) lower Silesia. Nearby and to the east The main Nazi Bell facility itself was located in the Wenceslas mine at Ludwigsdorf (modern Ludwikowice). First experiments with the Nazi Bell occurred in May and June 1944.

Evidence of the Project's existence

At Farm Hall after the War whilst interned by the Allies, Prof Gerlach complained to colleagues about difficulties assembling the engineers required for his photo-chemistry project. [5][6]

Gerlach: It is not true that we neglected the separation of isotopes. On the contrary, we discussed the whole thing at Tübingen in February and there was a meeting at Munich. Clusius, Harteck and I said that this photo chemical thing must be done. It took until the end of the year before the people who could do it were got together and the spectrograph obtained and special accommodation acquired, as the Litz Institute had been smashed up.

In fact project engineer, SS officer and ardent Nazi Dr Kurt Debus, denounced his colleague at AEG, Dr Richard Cremer to the Gestapo. On Cremer's behalf another colleague Dr Carl Ramsauer intervened and wrote to the Gestapo about the importance of Cremer's work referring to the nature of their project:



Loosly translated as language is not my strength the message says:

Herr Doctor-engineer Richard Kremer from AEG transformer factory, together with the research institute of AEG is developing the project with regard to high voltage, which was commissioned by the Office of Army Ordinance as a secret device, for deciding the course of war.

Realisation of this project is half dependent on Kremer, who is only AEG employee qualified in this special field of electricity. Without the co-operation of Kremer further implementation of this project is impossible. Can we not choose to temporarily waive punishment?

Anti Gravity Claims

Unfortunately the Nazi Bell attracts a lot of outlandish claims linking it to anti-gravity theories, or claims that it was a propulsion system for UFOs. I do not subscribe to, nor agree with such claims.

Some such claims may have been intended as disinformation by Sporrenberg to his interrogators. Others may be founded on Dr Ronald Richter's work in Argentina during the early

1950s on plasma shockwave induced fusion and his claims in a letter seeking work in USA on plasma ramjet engines. Richter claimed this engine could enable vertical take of fighters, but with fuel consumption 20 times greater than that of a comparable jet engine.

Joseph Farrell wrote that Gerlach never before the war referred to Gravitational physics, nor after the war returned to the subject. Oddly I point out that Gerlach made no reference to the subject during the war either. Farrell apparently ignores the obvious that this absence only corroborates the Bell had nothing to do with anti-gravity.

Gerlach never applied himself to gravitational physics during the war period. Farrell quotes Nick Cook in the book Hunt for Zero Point, suggesting that Gerlach was frightened off the subject, yet this is just circular reasoning, trying to suggest that because he never... EVER referred to gravitational physics, therefore he must have been a cover-up. These comments should be consigned to the illogical scrap heap of disinformation. There was no such connection. Farrell and others use interpretations, or inferences to qualify their claims.

Identities within the Bell Project

Of the other Nazi engineers or scientists claimed, or thought to be involved with the Nazi Bell, were Prof Kurt Debus, Dr Ronald Richter, Ing Otto Cerny, Dr Otto Ambros, Dr Elizabeth Adler and Ing Dr Richard Cramer. Witkowski in his book noted from Polish Intelligence sources that the SS shot 66 scientists involved with the Bell to prevent their falling into Soviet hands.[7] These however may have been captured Soviet and eastern European "guest workers."

There are two distinct bodies of scientists and engineers involved. Those who developed the device itself Like Richter, Cremer, Cerny and Debus, were more in the realm of high voltage electrical engineers. Ambros, Adler and Gerlach on the other hand were more likely concerned with the applications of the Bell device.



Photo of a Ju-290, four engined relative of the Ju-390 which evacuated the Bell.

Dr Elizabeth Adler was a mathematician said to have been evacuated with the Bell and Debus on a Junkers Ju-390 flight in April 1945.[8] [9] Mathematics play an important role in calculating particle deflection in quantum physics. No record of Adler survives the war, however Gerlach's assistant before the war was a talented mathematician Miss Elisabeth Borman who had also worked for Max Born. It is known that their favourite hotel in Stockholm was the Adler Hotel.

Dr Otto Ambros was expert in Chemical warfare and chairman of Albert Speer's "S" Committee. The Bell served two different projects. One for nuclear physics and the other for biological warfare research, in particular studying the effects of radiation exposure on Concentration camp inmates, animals and plants.

Bell Engineers

Kurt Debus is best known for his role in managing V-2 launches for the SS and later working for NASA on Apollo moon launches. He also had expertise however in the measurement of high voltage discharges. His official NASA biography says:

Born in Frankfurt, Germany, in 1908, Dr. Debus received all his schooling in that country. He attended Darmstadt University where he earned his initial and advanced degrees in mechanical and electrical engineering. He served as a graduate assistant on the faculty for electrical engineering and high-voltage engineering while studying for his master's degree. In 1939 he obtained his engineering doctorate with a thesis on surge voltages and was appointed assistant professor at the university. During this period he became actively engaged in the rocket research program at Peenemunde.

A common criticism of the Bell story is that the only reference to it's existence is from Witkowski's claim of Sporrenberg's post war testimony, however Debus also described the Bell. Document dated April 22, 1943 Foreign Scientist Case Files, K Debus NARA/RG 28, US Nat. Archive, College Park, Maryland USA.

Another reference to the Bell's existence comes from Prof Meiczyslaw Moldovia, a former prisoner of Gross Rosen Concentration camp who worked at the technical office in Furstenstein Castle. One of the few to survive

Dr Otto Cerny revealed his role in the Nazi Bell in the early 1960s whilst working for NASA to Greg Rowe's father. Greg recalled listening to the conversation as a child and recounted it for Henry Stevens. Cerny described it as something like a ring of stones with a hoop inside which sat the Bell. Cerny also mentioned a concave mirror above the axis through which one could see backwards.[10] The JIOA list of scientists most of whom were recruited for Operation Paperclip to work for USA. The list refers to Cerny as "Elec. Instal. on Supersonics" and that he had been attached to the technical University of Vienna. The Vienna technical university was involved with an underground SS nuclear facility at Melk and a nuclear research laboratory at Zell am See.

Cremer was a transformer engineer from Oberschönweide whom together with the AEG Research Institute was developing the Hochspannungsprojekt (High Voltages Project) under contract to Heereswaffenamt (HWA). This project was reborn under the SS in July 1944, codenamed Charite Anlage with the priority code reference SS/1040. When Cremer was denounced to the Gestapo by Gerlach, AEG Research institute's Prof Dr. Carl Ramsaur defended Cremer's importance to the war effort and the highest priority work of Prof Dr E. Schumann, to secure Cremer's release. Ramsaur's letter links the Bell with German atomic bomb research.

Clues to Bell's Purpose

Dr Eric Schumann of course was working on designs in 1943 with Dr Walter Trinks for hollow, shaped charge tactical atomic weapons using Uranium 233 as their fissile mass. The question of course arises where would Schumann obtain extremely rare and hard to separate Uranium 233?

The answer I suggest is the Bell produced Uranium 233 for Schumann. Rainer Karlsh's book, Hitler's Bombe relates that a team of physicists from Leibig University at Giessen carried out a lot

of research at Ludwikowize, which is where the Nazi Bell was located. Sporrenberg commented on various animals and personnel dying horrible deaths after exposure to the Bell. He said their flesh would liquify. Giessen is north of Frankfurt am Main and it's research appears focused on genetics and biological research. Was this ghastly research to discover what radiation could do to Germany's enemies?

Bell as a Uranium/Plutonium Breeder?

Otto Hahn experimented before the war with Lise Meitner on photo-fission techniques to determine the properties of slow neutrons and transmutation of elements. Because Hahn was not particularly gifted, or insightful, he relied heavily upon Meitner who as a Jewish scientist fled to Stockholm in 1938. Hahn used the excellent air mail service between Berlin and Stockholm throughout the war to seek Meitner's advice and unwittingly was the prime security breach for Nazi Germany's entire nuclear effort. Everything Hahn knew was relayed to MI5 through Operation Epsilon. [11]

Dr Ing Ernst Nagelstein contacted the OSS in Switzerland on 2nd November 1944 and disclosed that the Auer Company was refining Thorium to metal and he claimed there was no known use in Germany for Thorium. In pre war days Thorium had been used in toothpaste, but this use had ceased during the war. Apart from large captured stocks of Thorium in France, which were suddenly removed to Germany in 1944 after Normandy landings, Thorium was also mined in the Erzbirge, right next to the Wenceslas mine, home to the Bell project. Nagelstein added that Otto Hahn was working on the Atomic bomb using either Thorium, or Uranium.

Other scientists known to have been involved included Dr Herman Oberth who in late September 1944 journeyed with Dr Herbert Jensen (nuclear physicist), Dr Edward Tholen and Dr Elizabeth Adler from Prague to Breslau. The Nazi Bell was located a short distance southwest of Breslau. [12] Oberth's wartime expertise lay in developing special explosives. Schumann relied upon special high speed explosives for his shaped hollow charge mini nukes.

The importance of Schumann being linked with the Bell project is that he and Trinks had made a patent application for a hollow charge A-bomb which specified use of U233 as it's fissile core. Thorium 232, if bombarded by Protons with less than 14MeV energy, may be transmuted to Uranium 233 without the risk of dangerous contamination by Uranium 232. This process is called Photo Fission, or Recoil Based Fuel Breeding. This method can also breed Plutonium 239 from Uranium 238.

Notes:

[1]Witkowski, Igor. *The Truth About the Wunderwaffe*, p.231.

[2](NA Gerlach's Report dated 2 May 1945, RG 302, ref 244)

[3] Deichmann, Ute & Dunlap, Thomas. *Biologists Under Hitler*, p.13

[4] Farrell, Joseph. *The SS Brotherhood of the Bell: The Nazis' Incredible Secret Technology*. P.147-148

[5] Bernstein, Jeremy. Hitler's Uranium Club, The Secret recordings at Farm Hall. pp.134-135

[6] Litz Institute, likeliest location Dessau aircraft manufacturing complex. Litz wire is a multi-braded wire for conducting very high voltage charges.

[7] Witkowski, Igor. *The Truth About the Wunderwaffe*, p.242-243. Witkowski believing these to be German scientists is perhaps unaware the degree to which captured Soviet scientists were recruited for work on SS projects and the probability that scientists who were shot were likely to be Russian scientists.

[8] [9] Bell evacuation flight noted in Farrell, Joseph. *Giza Death Star Deployed*, pp 115-130, based upon report of SS Hauptsturmführer Rudolf Schuster's interrogation, Berlin Document Centre.

[10] Stevens, Henry (2007) Adventures Unlimited Press. Hitler's Suppressed and Still Secret Weapons, Science and Technology. pp.251-255

[11] Bodanis, David. $E=MC^2$ p.105

[10] Witkowski, Igor. *The Truth About the Wunderwaffe*, p.257.

© Simon Gunson (2010)

<mailto:symngun@gmail.com>

Comments